

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. - 5. cancel

6. (currently amended): An alternator comprising:

a rotor fixed to a shaft so as to rotate with said shaft;

a stator disposed so as to surround said rotor, an alternating current being generated in said stator by a rotating magnetic field from said rotor; and

a voltage control apparatus for adjusting magnitude of an output voltage of said alternating current generated in said stator,

wherein:

said voltage control apparatus comprises

a grounded, electrically-conductive heat sink; and

a control main body fixed to said heat sink, said control main body including an integrated circuit chip on which a circuit for controlling said output voltage is formed,

said grounded heat sink being positioned to block electromagnetic noise from penetrating through said heat sink to said integrated circuit chip.

7. (previously presented): The alternator according to Claim 6, wherein
a positioning portion for positioning said control main body relative to said heat sink is
disposed on said heat sink so as to project from a major surface of said heat sink to which said
control main body is fixed.

8. (previously presented): The alternator according to Claim 6, wherein:
a blocking portion is disposed on said heat sink between a connector having terminals for
electrical connection to an external portion and said integrated circuit chip, said blocking portion
blocking electromagnetic noise from said connector.

9. (previously presented): The alternator according to Claim 6, wherein:
said control main body is a molded package in which said integrated circuit chip is
enveloped in a resin.

10. (previously presented): The alternator according to Claim 9, wherein:
said molded package has a hexahedral shape; and
said heat sink has a substantially angular C-shaped cross section and is placed in close
contact with at least three surfaces of said molded package excluding a surface from which
connecting terminals project.